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EPA RISK ASSESSMENTS: TWO COMPARISONS**EMF (Electromagnetic Fields)****ETS (Environmental Tobacco Smoke)****1. Strength of Association**

"The association between cancer occurrence and exposure to either EFL or RF fields is not strong enough to constitute a proven causal relationship, largely because the relative risks in the published reports have seldom exceeded 3.0 in both childhood residential exposure and in occupational situations."

All studies used in the meta analysis calculation have relative risks less than 3.0. The EPA calculated the relative risk for ETS (via meta-analysis) to be 1.28.

2. Consistency of Association and Statistical significance

"The consistently repeated pattern of lymphoma, leukemia, nervous system cancer and lymphoma in childhood studies and the ruling out of several confounding exposure factors in the Savitz et al. (1988) study argue in favor of a causal link between these tumor types in children and exposure to ELF magnetic or electric fields. However, the fact that the odds ratios are small and in many cases not statistically significant indicates that the association may not be strong and therefore argues against a causal relationship."

18 of 23 studies are not statistically significant.

3. Confounding Factors

"No other agents (confounding factors) have been identified to explain this association."

A number of independent risk factors (confounding factors) for lung cancer have been identified (occupation, cooking oils & diet).

4. Animal Studies

"Both animal and in vitro studies are needed to discover the relevant exposure factors and their interaction and to gain some understanding of the mechanisms of action."

Animal studies attempting to elicit lung cancer as a result of ETS exposure have failed.

5. EPA Draft Recommendation

No classification

Group A: Known Human Carcinogen